CRITERIA HAVING FINDINGS OR OBSERVATIONS
SUPPLEMENT TO THE FY 2002 ACSEP REPORT

Prepared by
Aircraft Certification Service

TABLE OF CONTENTS

INTRODUCTION

The following tables provide the specific criteria data collected during FY 2002 ACSEP evaluations conducted at production approval holders. Tables 1 through 4 present data from all approval types combined. The remainder of the tables present data for the particular approval type specified.

Table 1. – Systemic Findings

Criteria	Description	Number of Systemic Findings	Percent of Total Systemic Findings	Percent with Procedures in Place
4P9	Completed product/part identification	21	6%	11%
5Q3	Accord with process specifications	19	5%	14%
4P4	Work instructions control manufacturing processes	14	4%	8%
11Q1	Control of nonconforming products	13	4%	7%
10Q1	Initial & periodic evaluation of suppliers	11	3%	6%
12Q5	Identification of age control products	11	3%	7%
4Q5	Inspection records	10	3%	5%
15M1	Internal auditing program	9	3%	5%
4Q1	Inspection methods and plans	9	3%	5%
4M1	Operation within production limitations	8	2%	4%
11Q2	Permanent identification of scrap material	8	2%	4%
4Q12	Completion of all inspections and tests	7	2%	4%
10Q10	Receiving inspection	7	2%	3%
2E7	Design/Technical data document control	7	2%	4%
2C1	Minor design change approval	6	2%	3%
10Q5	Flowdown of technical and quality requirements	6	2%	4%
10Q2	Use of approved suppliers	5	1%	3%
7Q1	Approval/inspection of tools and gauges	5	1%	3%
4Q3	Issuance of inspection stamps	5	1%	3%
2C4	Data submittal for TSO minor design change approval	5	1%	8%
2C2	Major Design Change Approval	5	1%	3%

Criteria	Description	Number of Systemic Findings	Percent of Total Systemic Findings	Percent with Procedures in Place
5E1	All special processes in use identified	5	1%	4%
4P3	Work instructions reflect tech data	5	1%	3%
4E1	Accord with FAA-approved design data	5	1%	3%
12Q1	Prevention of part damage/contamination	5	1%	3%
1Q4	Quality Manual	4	1%	2%
8E1	Test procedures/instructions established	4	1%	3%
7Q2	Instructions for acceptance tooling	4	1%	2%
5Q2	Required qualifications/approvals	4	1%	3%
4P2	Work instructions prepared	4	1%	2%
12Q3	Storage of conforming parts	4	1%	2%
11Q4	Material review record generated	4	1%	2%
11Q3	MRB established and operational	3	1%	2%
2E2	Drawing control system	3	1%	2%
7Q4	Traceability to national/international standards	3	1%	2%
7Q14	Identification of gauges	3	1%	2%
2E9	Technical data file	3	1%	2%
12Q8	Conforming products packaged and shipped	3	1%	2%
10Q4	Control of buyer-furnished material	3	1%	3%
2E1	Design change approval	2	1%	1%
2E8	Major/minor design changes	2	1%	1%
2E6	Storage of design documents	2	1%	1%
7Q3	Tool & Gauge recall system	2	1%	1%
7Q12	Calibration records	2	1%	1%

Criteria	Description	Number of Systemic Findings	Percent of Total Systemic Findings	Percent with Procedures in Place
1Q5	Tags, forms, etc. described	2	1%	1%
9Q14	Critical penetrant parameters identified	2	1%	2%
9Q1	Operator qualification	2	1%	2%
7Q18	Action on product measured by SOT gauge	2	1%	2%
7Q16	Inaccurate tools and gauges identified	2	1%	1%
5Q4	Records maintained	2	1%	2%
5Q1	Equipment available and calibrated	2	1%	2%
4Q2	Location of inspection stations	2	1%	2%
4P5	Work instruction revision approval	2	1%	1%
1Q3	Quality Assurance staff qualifications	2	1%	2%
14C1	Failure reporting	2	1%	1%
12Q4	Segregation of products in storage	2	1%	1%
12Q2	Special environmental control	2	1%	1%
11Q6	Corrective action required	2	1%	1%
10Q9	Verification of shelf-life materials	2	1%	1%
10Q8	Verification of raw material	2	1%	1%
10Q12	Records of receiving inspection	2	1%	1%
10C1	Delegation of major inspection authority	2	1%	3%
6Q1	Statistical sampling inspection plans	1	0%	1%
1M5	Policy document review	1	0%	1%
9E2	Control of NDI processes and changes	1	0%	1%
7Q7	Accuracy of inspection & test equipment	1	0%	1%
7Q6	Calibration and use in acceptable environment	1	0%	1%

Criteria	Description	Number of Systemic Findings	Percent of Total Systemic Findings	Percent with Procedures in Place
4P7	Identification/control of partially accepted parts	1	0%	1%
4P6	Familiarity with specifications	1	0%	1%
3BE1	Software Configuration Management Plan	1	0%	1%
3AE1	Software Configuration Management Plan	1	0%	1%
2E3	Technical data change approval	1	0%	1%
1Q6	Record retention schedule	1	0%	0%
9Q9	Records of compliance	1	0%	1%
9Q8	Acceptance/rejection criteria provided	1	0%	1%
8Q1	QA review of test instructions	1	0%	1%
8E3	Approved flight checkoff form	1	0%	3%
8E2	Control of test procedure/ instruction change	1	0%	1%
7Q15	Care of tool and gauges	1	0%	1%
7Q11	Control of production tooling	1	0%	1%
6Q6	Training in SPC techniques	1	0%	1%
6Q2	Training in sampling techniques	1	0%	1%
5Q5	Action on process out of control	1	0%	1%
4Q9	Traceability to raw material	1	0%	1%
4Q10	Inspection marking	1	0%	1%
4P10	Aircraft marking	1	0%	4%
3BQ2	Build and load instructions	1	0%	1%
3BQ1	Verification prior to use	1	0%	1%
3BE4	Software security	1	0%	1%
3BE2	Change documentation and approval	1	0%	1%
3AE4	Recall/purge of obsolete software	1	0%	1%

Criteria	Description	Number of Systemic Findings	Percent of Total Systemic Findings	Percent with Procedures in Place
2S3	AD/safety-related design changes to users	1	0%	1%
2Q1	QA review of design/technical data changes	1	0%	1%
2C3	Distribution of Inst. for Continued Airworthiness approval	1	0%	1%
1S3	Service/Product Support staff qualifications	1	0%	1%
1Q1	Quality organization described	1	0%	1%
17Q6	Completion of all requirements	1	0%	1%
17Q3	Work in accordance with Part 43 requirements	1	0%	1%
16Q5	Documents to importing country	1	0%	1%
14C3	Submittal of quality system data changes	1	0%	1%
13Q1	Log books	1	0%	3%
12Q7	Control of product removal/issuance	1	0%	1%
11E1	Engineering review for major/minor changes	1	0%	1%
10Q7	Action on problem notification	1	0%	1%
10Q6	Quality Assurance review of purchase documents	1	0%	1%
10Q3	Approval of supplier quality manual	1	0%	1%

Table 2. – Systemic Observations

Criteria	Description	Number of Systemic Observations	Percent of Total Systemic Observations	Percent with Procedures in Place
10Q1	Initial and periodic evaluation of suppliers	11	11%	6%
10Q2	Use of approved suppliers	8	8%	4%
7Q1	Approval/inspection of tools & gauges	6	6%	3%
2E1	Design change approval	6	6%	3%
4P4	Work instructions control manufacturing processes	5	5%	3%
11Q1	Control of nonconforming products	3	3%	2%
15M1	Internal auditing program	3	3%	2%
11Q3	MRB established and operational	3	3%	2%
4P9	Completed product/part identification	2	2%	1%
4Q12	Completion of all inspections and tests	2	2%	1%
4Q3	Issuance of inspection stamps	2	2%	1%
1Q4	Quality Manual	2	2%	1%
2E8	Major/minor design changes	2	2%	1%
2E6	Storage of design documents	2	2%	1%
6Q1	Statistical sampling inspection plans	2	2%	2%
1M5	Policy document review	2	2%	1%
7Q9	Control of special processing equipment	2	2%	2%
12Q5	Identification of age control products	1	1%	1%
4Q1	Inspection methods and plans	1	1%	1%
10Q10	Records of receiving inspection	1	1%	0%
2C1	Minor design change approval	1	1%	1%

Criteria	Description	Number of Systemic Observations	Percent of Total Systemic Observations	Percent with Procedures in Place
2C4	Data submittal for TSO minor design change approval	1	1%	2%
2C2	Major Design Change Approval	1	1%	1%
8E1	Test procedures/ instructions established	1	1%	1%
7Q2	Instructions for acceptance tooling	1	1%	1%
5Q2	Required qualifications/approvals	1	1%	1%
4P2	Work instructions prepared	1	1%	1%
12Q3	Storage of conforming parts	1	1%	1%
2E2	Drawing control system	1	1%	1%
7Q3	Tool and gauge recall system	1	1%	1%
7Q12	Calibration records	1	1%	1%
1Q5	Tags, forms, etc. described	1	1%	1%
9E2	Control of NDI processes and changes	1	1%	1%
7Q7	Accuracy of inspection & test equipment	1	1%	1%
7Q6	Calibration and use in acceptable environment	1	1%	1%
4P7	Identification/control of partially accepted parts	1	1%	1%
4P6	Familiarity with specifications	1	1%	1%
3BE1	Software Configuration Management Plan	1	1%	1%
3AE1	Software Configuration Management Plan	1	1%	1%
2E3	Technical data change approval	1	1%	1%
1Q6	Record retention schedule	1	1%	0%
9Q6	Identification of known-defect samples	1	1%	1%

Criteria	Description	Number of Systemic Observations	Percent of Total Systemic Observations	Percent with Procedures in Place
9Q3	NDI procedures/specifications available and used	1	1%	1%
9Q11	Critical radiographic parameters identified	1	1%	2%
6Q10	Corrective action	1	1%	1%
4Q6	Cleaners, solvents, etc. identified	1	1%	1%
4P1	Change approval	1	1%	1%
2S1	Service/Product support review of design changes	1	1%	1%
2E4	AD incorporation into design	1	1%	1%
15M2	Feedback to higher-level management	1	1%	1%

Table 3. – Isolated Observations

Criteria	Description	Number of Isolated Observations	Percent of Total Isolated Observations	Percent with Procedures in Place
10Q1	Initial and periodic evaluation of suppliers	6	4%	3%
7Q1	Approval/inspections of tools & gauges	5	4%	3%
10Q2	Use of approved suppliers	5	4%	3%
4P9	Completed product/part identification	4	3%	2%
11Q2	Permanent identification of scrap material	4	3%	2%
11Q1	Control of nonconforming products	4	3%	2%
8E2	Control of test procedure/instruction changes	3	2%	2%
7Q3	Tool and gauge recall system	3	2%	2%
7Q14	Identification of gauges	3	2%	2%
7Q11	Control of production tooling	3	2%	2%
5Q4	Records maintained	3	2%	2%
4P4	Work instructions control manufacturing processes	3	2%	2%
4P2	Work instructions prepared	3	2%	2%
2E7	Design/Technical data document control	3	2%	2%
2E2	Drawing control system	3	2%	2%
15M2	Feed-back to higher level management	3	2%	2%
15M1	Internal auditing program	3	2%	2%
10Q10	Records of receiving inspection	3	2%	1%
7Q4	Traceability to national/international standards	2	1%	1%
7Q16	Inaccurate tools & gauges identified	2	1%	1%
5Q3	Accord with process specifications	2	1%	1%

Criteria	Description	Number of Isolated Observations	Percent of Total Isolated Observations	Percent with Procedures in Place
4Q9	Traceability of raw material	2	1%	1%
4Q6	Policies/ procedures availability	2	1%	1%
4Q1	Inspection methods and plans	2	1%	1%
4P1	Change approval	2	1%	1%
4E1	Accord with FAA-approved design data	2	1%	1%
3AE5	Software security	2	1%	2%
2E1	Design change approval	2	1%	1%
2C4	Data submittal for TSO minor changes	2	1%	3%
1Q4	Quality Manual	2	1%	1%
13E1	AD incorporation	2	1%	2%
12Q5	Identification of age control products	2	1%	1%
12Q4	Segregation of products in storage	2	1%	1%
12Q3	Storage of conforming parts	2	1%	1%
12Q2	Special environmental controls	2	1%	1%
11Q4	Material review record generated	2	1%	1%
11Q3	MRB established and operational	2	1%	1%
10Q12	Records of receiving inspection	2	1%	1%
9Q9	Records of compliance	1	1%	1%
9Q4	Tanks and solutions checked	1	1%	1%
7Q9	Control of special processing equipment	1	1%	1%
7Q6	Calibration and use in acceptable environment	1	1%	1%
7Q15	Care of tools & gauges	1	1%	1%
6Q2	Training in sampling techniques	1	1%	1%
6Q1	Statistical sampling inspection plans	1	1%	1%

Criteria	Description	Number of Isolated Observations	Percent of Total Isolated Observations	Percent with Procedures in Place
5Q2	Required qualifications/approvals	1	1%	1%
5Q1	Equipment available and calibrated	1	1%	1%
4Q5	Inspection records	1	1%	0%
4Q3	Issuance of inspection stamps	1	1%	1%
4Q12	Completion of all inspections and tests	1	1%	1%
4Q10	Inspection marking	1	1%	1%
4P7	Identification/control of partially accepted parts	1	1%	1%
4P6	Identification/control of partially accepted parts	1	1%	1%
4P5	Work instruction revision approval	1	1%	1%
4P3	Work instructions reflect tech data	1	1%	1%
3BE4	Software security	1	1%	1%
2Q1	QA review of design/technical data changes	1	1%	1%
2C1	Minor design change approval	1	1%	1%
1Q5	Tags, forms, etc. described	1	1%	1%
1Q3	Quality Assurance staff qualifications	1	1%	1%
1M6	Policy/procedures availability	1	1%	1%
1M4	FAA designee authority	1	1%	1%
14C4	Relocation of manufacturing facility	1	1%	1%
14C1	Failure reporting	1	1%	1%
12Q1	Prevention of part damage/contamination	1	1%	1%
11Q7	Corrective action monitored	1	1%	1%
10Q9	Verification of shelf-life materials	1	1%	1%
10Q5	Flow down of technical and quality requirements	1	1%	1%

Table 4. – CFR-Based Observations

Criteria	Description	Number of CFR-Based Observations	Percent of Total CFR-Based Observations	Percent with Procedures in Place
4Q2	Location of inspection stations	4	10%	3%
4P9	Completed product/part identification	3	8%	2%
10Q8	Verification of raw material	3	8%	2%
6Q1	Statistical sampling inspection plans	2	5%	2%
2E8	Major/minor design changes	2	5%	1%
1Q6	Record retention schedule	2	5%	1%
1Q4	Quality Manual	2	5%	1%
8C1	Approval of flight test procedures	1	3%	3%
7Q16	Inaccurate tools & gauges identified	1	3%	1%
5Q3	Accord with process specifications	1	3%	1%
4Q1	Inspection methods and plans	1	3%	1%
4P1	Change approval	1	3%	1%
4E1	Accord with FAA-approved design data	1	3%	1%
3AE2	Configuration Index Document	1	3%	1%
2E9	Technical data file	1	3%	1%
2E7	Design/Technical data document control	1	3%	1%
2E2	Drawing control system	1	3%	1%
2E1	Design change approval	1	3%	1%
2C3	Distribution of Inst. for Continued Airworthiness approval	1	3%	1%
2C1	Minor design change approval	1	3%	1%
1Q5	Tags, forms, etc. described	1	3%	1%
1M2	Organizations described	1	3%	1%
15M1	Internal auditing program	1	3%	1%

Criteria	Description	Number of CFR-Based Observations	Percent of Total CFR-Based Observations	Percent with Procedures in Place
14C3	Submittal of quality system data changes	1	3%	1%
13E1	AD incorporation	1	3%	1%
12Q6	Incorporation of design changes	1	3%	1%
11Q1	Control of nonconforming products	1	3%	1%
11C1	Major changes approved	1	3%	1%

Table 5. – Systemic Findings at TSO Facilities

Criteria	Description	Number of Systemic Findings	Percent of TSO Systemic Findings	Percent with Procedures in Place
4P9	Completed product/part identified	9	6%	8%
4Q5	Inspection records	7	4%	6%
12Q5	Identification of age control products	7	4%	8%
5Q3	Accord with process specifications	6	4%	8%
4P4	Work instructions control manufacturing processes	6	4%	6%
15M1	Internal auditing program	6	4%	6%
11Q2	Permanent identification of scrap material	6	4%	6%
2C4	Data submittal for TSO minor changes	5	3%	100%
10Q2	Use of approved suppliers	5	3%	5%
4Q3	Issuance of inspection stamps	4	3%	4%
4P3	Work instructions reflect tech data	4	3%	4%
4M1	Operation within production limitations	4	3%	4%
10Q10	Receiving inspection	4	3%	3%
10Q1	Initial and periodic evaluation of suppliers	4	3%	4%
5E1	All special processes in use identified	3	2%	4%
4P2	Work instructions prepared	3	2%	3%
1Q4	Quality Manual	3	2%	3%
10Q5	Flow down of technical and quality requirements	3	2%	3%
8E1	Test procedures/ instructions established	2	1%	3%
7Q18	Action on product measured by SOT gauge	2	1%	4%
5Q4	Records maintained	2	1%	3%
2E9	Technical data file	2	1%	2%
2E6	Storage of design documents	2	1%	2%
2E1	Design change approval	2	1%	2%

Criteria	Description	Number of Systemic Findings	Percent of TSO Systemic Findings	Percent with Procedures in Place
1Q3	Quality Assurance staff qualifications	2	1%	3%
12Q8	Conforming products packaged and shipped	2	1%	2%
12Q3	Storage of conforming parts	2	1%	2%
11Q4	Material review record generated	2	1%	2%
11Q3	MRB established and operational	2	1%	2%
11Q1	Control of nonconforming products	2	1%	2%
10Q4	Control of buyer-furnished material	2	1%	4%
10C1	Delegation of major inspection authority	2	1%	7%
9E2	Control of NDI process and changes	1	1%	2%
8Q1	QA review of test instructions	1	1%	1%
8E2	Control of test procedure/instruction changes	1	1%	1%
7Q6	Calibration and use in acceptable environment	1	1%	1%
7Q4	Traceability to national/international standards	1	1%	1%
7Q3	Tool & gauge recall system	1	1%	1%
7Q2	Instructions for acceptance tooling	1	1%	1%
7Q16	Inaccurate tools & gauges identified	1	1%	1%
7Q15	Care of tools & gauges	1	1%	1%
7Q14	Identification of gauges	1	1%	1%
7Q12	Calibration records	1	1%	1%
7Q1	Approval/inspections of tools & gauges	1	1%	1%
5Q5	Action on process out of control	1	1%	2%
5Q2	Required qualifications/approvals	1	1%	2%

Criteria	Description	Number of Systemic Findings	Percent of TSO Systemic Findings	Percent with Procedures in Place
5Q1	Equipment available and calibrated	1	1%	2%
4Q9	Traceability of raw material	1	1%	1%
4Q2	Location of inspection stations	1	1%	2%
4Q12	Completion of all inspections and tests	1	1%	1%
4Q1	Inspection methods and plans	1	1%	1%
4P6	Familiarity with specifications	1	1%	1%
4E1	Accord with FAA-approved design data	1	1%	1%
3AE4	Recall/purge of obsolete software	1	1%	3%
2Q1	QA review of design/technical data changes	1	1%	1%
2E7	Design/Technical data document control	1	1%	1%
2E2	Drawing control system	1	1%	1%
2C1	Minor design change approval	1	1%	1%
1S3	Service/Product Support staff qualifications	1	1%	2%
1Q5	Tags, forms, etc. described	1	1%	1%
1M5	Policy document review	1	1%	1%
17Q6	Completion of all requirements	1	1%	3%
17Q3	Work in accordance with Part 43 requirements	1	1%	2%
16Q5	Documents to importing country	1	1%	2%
14C1	Failure reporting	1	1%	1%
12Q7	Control of product removal/issuance	1	1%	1%
12Q4	Segregation of products in storage	1	1%	1%
11Q6	Corrective action required	1	1%	1%

Criteria	Description	Number of Systemic Findings	Percent of TSO Systemic Findings	Percent with Procedures in Place
11E1	Engineering review of major/minor changes	1	1%	1%
10Q9	Verification of shelf-life materials	1	1%	1%
10Q8	Verification of raw material	1	1%	1%
10Q7	Action on problem notification	1	1%	1%
10Q3	Approval of supplier quality manual	1	1%	2%
10Q12	Records of receiving inspection	1	1%	1%

Table 6. – Systemic Observations at TSO Facilities

Criteria	Description	Number of Systemic Observations	Percent of TSO Systemic Observations	Percent with Procedures in Place
11Q1	Control of nonconforming products	3	13%	3%
10Q1	Initial and periodic evaluation of suppliers	3	13%	3%
7Q1	Approval/inspections of tools & gauges	2	9%	2%
4P4	Work instructions control manufacturing processes	2	9%	2%
10Q2	Use of approved suppliers	2	9%	2%
9Q6	Identification of known-defect samples	1	4%	2%
9E2	Control of NDI process and changes	1	4%	2%
8E1	Test procedures/ instructions established	1	4%	1%
5Q2	Required qualifications/approvals	1	4%	2%
2S1	Service/Product support review of design changes	1	4%	2%
2E8	Major/minor design changes	1	4%	1%
2C4	Data submittal for TSO minor changes	1	4%	33%
2C1	Minor design change approval	1	4%	1%
1Q4	Quality Manual	1	4%	1%
15M1	Internal auditing program	1	4%	1%
12Q3	Storage of conforming parts	1	4%	1%

Table 7. – Isolated Observation at TSO Facilities

Criteria	Description	Number of Isolated Observations	Percent of TSO Isolated Observations	Percent with Procedures in Place
7Q3	Tool & gauge recall system	2	5%	2%
5Q4	Records maintained	2	5%	3%
2E7	Design/Technical data document control	2	5%	2%
12Q2	Special environmental controls	2	5%	3%
11Q3	Approval of supplier quality manual	2	5%	2%
10Q12	Records of receiving inspection	2	5%	2%
10Q1	Initial and periodic evaluation of suppliers	2	5%	2%
8E2	Control of test procedure/ instruction change	1	3%	1%
7Q1	Approval/inspections of tools & gauges	1	3%	1%
6Q1	Statistical sampling inspection plans	1	3%	2%
5Q3	Accord with process specifications	1	3%	1%
4Q6	Policies/ procedures availability	1	3%	1%
4Q3	Issuance of inspection stamps	1	3%	1%
4P9	Completed product/part identification	1	3%	1%
4P4	Work instructions control manufacturing processes	1	3%	1%
4P1	Change approval	1	3%	1%
4E1	Accord with FAA-approved design data	1	3%	1%
3AE5	Software security	1	3%	3%
2Q1	QA review of design/technical data changes	1	3%	1%
2E2	Drawing control system	1	3%	1%
2E1	Design change approval	1	3%	1%
2C4	Data submittal for TSO minor design change approval	1	3%	33%

Criteria	Description	Number of Isolated Observations	Percent of TSO Isolated Observations	Percent with Procedures in Place
1Q5	Tags, forms, etc. described	1	3%	1%
1Q3	Quality Assurance staff qualifications	1	3%	1%
15M1	Internal auditing program	1	3%	1%
14C1	Failure reporting	1	3%	1%
12Q5	Identification of age control products	1	3%	1%
12Q4	Segregation of products in storage	1	3%	1%
12Q3	Storage of conforming parts	1	3%	1%
12Q1	Prevention of part damage/contamination	1	3%	1%
10Q9	Verification of shelf-life materials	1	3%	1%
10Q5	Flow down of technical and quality requirements	1	3%	1%

Table 8. – CFR-Based Observations at TSO Facilities

Criteria	Description	Number of CFR-Based Observations	Percent of TSO CFR-Based Observations	Percent with Procedures in Place
4Q2	Location of inspection stations	4	19%	7%
4P9	Completed product/part identification	2	10%	2%
1Q6	Record retention schedule	2	10%	2%
1Q4	Quality Manual	2	10%	2%
7Q16	Inaccurate tools & gauges identified	1	5%	1%
6Q1	Statistical sampling inspection plans	1	5%	2%
4P1	Change approval	1	5%	1%
3AE2	Configuration Index Document	1	5%	3%
2E9	Technical data file	1	5%	1%
2E7	Design/Technical data document control	1	5%	1%
2C3	Distribution of Inst. for Continued Airworthiness approval	1	5%	2%
1Q5	Tags, forms, etc. described	1	5%	1%
1M2	Organizations described	1	5%	1%
13E1	AD incorporation	1	5%	1%
10Q8	Verification of raw material	1	5%	1%

Table 9. – Systemic Findings at PC Facilities

Criteria	Description	Number of Systemic Findings	Percent of PC Systemic Findings	Percent with Procedures in Place
4P4	Work instructions control manufacturing processes	7	9%	35%
5Q3	Drawing control system	4	5%	24%
12Q1	Prevention of part damage/contamination	4	5%	21%
15M1	Internal auditing program	3	4%	16%
11Q1	Control of nonconforming products	3	4%	14%
10Q1	Initial and periodic evaluation of suppliers	3	4%	18%
9Q14	Critical penetrant parameters identified	2	3%	13%
9Q1	Operator qualification	2	3%	12%
4Q1	Inspection methods and plans	2	3%	10%
4P5	Work instruction revision approval	2	3%	11%
4E1	Accord with FAA-approved design data	2	3%	10%
12Q5	Identification of age control products	2	3%	10%
9Q9	Records of compliance	1	1%	6%
9Q8	Acceptance/rejection criteria provided	1	1%	6%
8E3	Approved flight checkoff form	1	1%	8%
8E1	Test procedures/ instructions established	1	1%	5%
7Q4	Traceability to national/international standards	1	1%	5%
7Q2	Instructions for acceptance tooling	1	1%	5%
7Q16	Inaccurate tools & gauges identified	1	1%	5%
7Q14	Identification of gauges	1	1%	5%
7Q1	Approval/inspection of tools & gauges	1	1%	5%
6Q1	Statistical sampling inspection plans	1	1%	6%

Criteria	Description	Number of Systemic Findings	Percent of PC Systemic Findings	Percent with Procedures in Place
5Q2	Required qualifications/approvals	1	1%	6%
4Q5	Inspection records	1	1%	5%
4Q2	Location of inspection stations	1	1%	5%
4Q12	Completion of all inspections and tests	1	1%	5%
4P9	Completed product/part identification	1	1%	5%
4P7	Identification/control of partially accepted parts	1	1%	5%
4P2	Work instructions prepared	1	1%	5%
4P10	Aircraft marking	1	1%	8%
3BQ2	Build and load instructions	1	1%	6%
3BQ1	Verification prior to use	1	1%	6%
3BE4	Software security	1	1%	6%
3BE2	Change documentation and approval	1	1%	8%
3BE1	Software Configuration Management Plan	1	1%	6%
2S3	AD/safety-related design changes to users	1	1%	8%
2E8	Major/minor design changes	1	1%	6%
2E7	Design/Technical data document control	1	1%	5%
2E2	Drawing control system	1	1%	5%
2E1	Design change approval	1	1%	5%
2C3	Distribution of Inst. for Continued Airworthiness approval	1	1%	9%
14C3	Submittal of quality system data changes	1	1%	6%
14C1	Failure reporting	1	1%	6%
12Q2	Special environmental controls	1	1%	5%
11Q4	Material review board generated	1	1%	5%
10Q9	Verification of shelf-life materials	1	1%	6%

Criteria	Description	Number of Systemic Findings	Percent of PC Systemic Findings	Percent with Procedures in Place
10Q5	Flowdown of technical and quality requirements	1	1%	6%
10Q4	Control of buyer-furnished material	1	1%	8%
10Q12	Records of receiving inspection	1	1%	5%
10Q10	Receiving inspection	1	1%	6%

Table 10. – Systemic Observations at PC Facilities

Criteria	Description	Number of Systemic Observations	Percent of PC Systemic Observations	Percent of PC Facilities
2E6	Storage of design documents	2	18%	11%
9Q11	Critical radiographic parameters identified	1	9%	8%
7Q1	Approval/inspection of tools & gauges	1	9%	5%
6Q10	Corrective action	1	9%	8%
4Q3	Issuance of inspection stamps	1	9%	5%
4P2	Work instructions prepared	1	9%	5%
3BE1	Software Configuration Management Plan	1	9%	6%
2E1	Design change approval	1	9%	5%
2C2	Major Design Change Approval	1	9%	6%
12Q5	Identification of age control products	1	9%	5%

Table 11. – Isolated Observation at PC Facilities

Criteria	Description	Number of Isolated Observations	Percent of PC Isolated Observations	Percent with Procedures in Place
7Q1	Approval/inspection of tools & gauges	2	6%	10%
15M1	Internal auditing program	2	6%	11%
11Q2	Control of nonconforming products	2	6%	10%
11Q1	Control of nonconforming products	2	6%	10%
10Q2	Use of approved suppliers	2	6%	12%
7Q6	Calibration and use in acceptable environment	1	3%	5%
7Q11	Control of production tooling	1	3%	5%
6Q2	Training in sampling techniques	1	3%	8%
5Q4	Records maintained	1	3%	6%
5Q3	Drawing control system	1	3%	6%
5Q2	Required qualifications/approvals	1	3%	6%
5Q1	Equipment available and calibrated	1	3%	6%
4Q6	Policies/ procedures availability	1	3%	5%
4Q12	Completion of all inspections and tests	1	3%	5%
4Q10	Inspection marking	1	3%	5%
4P7	Identification/control of partially accepted parts	1	3%	5%
4P6	Familiarity with specifications	1	3%	5%
4P5	Work instruction revision approval	1	3%	5%
4P4	Work instructions control manufacturing process	1	3%	5%
4P2	Work instructions prepared	1	3%	5%
3BE4	Software security	1	3%	6%
3AE5	Software security	1	3%	9%
2E2	Drawing control system	1	3%	5%
1Q4	Quality Manual	1	3%	5%

Criteria	Description	Number of Isolated Observations	Percent of PC Isolated Observations	Percent with Procedures in Place
10Q10	Receiving inspection	1	3%	6%
10Q1	Permanent identification of scrap material	1	3%	6%

Table 12. – CFR-Based Observations at PC Facilities

Criteria	Description	Number of CFR-Based Observations	Percent of PC CFR-Based Observations	Percent with Procedures in Place
8C1	Approval of flight test procedures	1	14%	9%
4Q1	Inspection methods and plans	1	14%	5%
2E2	Drawing control system	1	14%	5%
2C1	Minor design change approval	1	14%	6%
15M1	Internal auditing program	1	14%	5%
14C3	Submittal of quality system data changes	1	14%	6%
11Q1	Control of nonconforming products	1	14%	5%

Table 13. – Systemic Findings at PMA Facilities

Criteria	Description	Number of Systemic Findings	Percent of PMA Systemic Findings	Percent with Procedures in Place
4P9	Completed product/part identification	11	9%	9%
5Q3	Accord with process specifications	9	8%	12%
11Q1	Control of nonconforming products	8	7%	7%
4Q1	Inspection methods and plans	6	5%	5%
4Q12	Completion of all inspections and tests	5	4%	4%
2E7	Design/Technical data document control	5	4%	4%
2C2	Major Design Change Approval	5	4%	5%
2C1	Records maintained	5	4%	4%
4M1	Operation within production limitations	4	3%	4%
10Q1	Initial and periodic evaluation of suppliers	4	3%	4%
7Q1	Approval/inspection of tools & gauges	3	3%	3%
7Q2	Instructions for acceptance tooling	2	2%	2%
5Q2	Required qualifications/approvals	2	2%	3%
5E1	All special processes in use identified	2	2%	3%
4Q5	Inspection records	2	2%	2%
4E1	Accord with FAA-approved design data	2	2%	2%
12Q5	Identification of age control products	2	2%	2%
12Q3	Storage of conforming parts	2	2%	2%
11Q2	Permanent identification of scrap material	2	2%	2%
10Q5	Flow down of technical and quality requirements	2	2%	2%
10Q10	Receiving inspection	2	2%	2%
8E1	Test procedures/instructions established	1	1%	1%

Criteria	Description	Number of Systemic Findings	Percent of PMA Systemic Findings	Percent with Procedures in Place
7Q7	Accuracy of inspection & test equipment	1	1%	1%
7Q4	Traceability to national/international standards	1	1%	1%
7Q3	Tool & gauge recall system	1	1%	1%
7Q14	Identification of gauges	1	1%	1%
7Q12	Calibration records	1	1%	1%
7Q11	Control of production tooling	1	1%	2%
6Q6	Training in SPC techniques	1	1%	3%
6Q2	Training in sampling techniques	1	1%	2%
5Q1	Equipment available and calibrated	1	1%	2%
4Q3	Issuance of inspection stamps	1	1%	1%
4Q10	Inspection marking	1	1%	1%
4P4	Work instructions control manufacturing processes	1	1%	1%
4P3	Control of special processing equipment	1	1%	1%
3AE1	Software Configuration Management Plan	1	1%	3%
2E9	Technical data file	1	1%	1%
2E8	Major/minor design changes	1	1%	1%
2E3	Completion of all inspections and tests	1	1%	1%
2E2	Drawing control system	1	1%	1%
1Q6	Record retention schedule	1	1%	1%
1Q5	Tags, forms, etc. described	1	1%	1%
1Q4	Quality Manual	1	1%	1%
1Q1	Quality organization described	1	1%	1%
13Q1	Log books	1	1%	8%
12Q8	Conforming products packaged and shipped	1	1%	1%

Criteria	Description	Number of Systemic Findings	Percent of PMA Systemic Findings	Percent with Procedures in Place
12Q4	Segregation of products in storage	1	1%	1%
12Q2	Special environmental controls	1	1%	1%
12Q1	Prevention of part damage/contamination	1	1%	1%
11Q6	Corrective action required	1	1%	1%
11Q4	Material review board generated	1	1%	1%
11Q3	MRB established and operational	1	1%	1%
10Q8	Verification of raw material	1	1%	1%
10Q6	Quality Assurance review of purchase documents	1	1%	1%

Table 14. – Systemic Observation at PMA Facilities

Criteria	Description	Number of Systemic Observations	Percent of PMA Systemic Observations	Percent with Procedures in Place
10Q1	Initial & periodic evaluation of suppliers	8	13%	8%
10Q2	Use of approved suppliers	6	10%	5%
2E1	Design change approval	5	8%	5%
7Q1	Inspection records	3	5%	3%
4P4	Work instructions control manufacturing processes	3	5%	3%
11Q3	MRB established and operational	3	5%	4%
7Q9	Control of special processing equipment	2	3%	3%
6Q1	Statistical sampling inspection plans	2	3%	3%
4Q12	Completion of all inspections and tests	2	3%	2%
4P9	Completed part/product identification	2	3%	2%
1M5	Policy document review	2	3%	2%
15M1	Internal auditing program	2	3%	2%
9Q3	NDI procedures/specifications available and used	1	2%	2%
7Q7	Accuracy of inspection & test equipment	1	2%	1%
7Q6	Calibration and use in acceptable environment	1	2%	1%
7Q3	Tool & Gauge recall system	1	2%	1%
7Q2	Instructions for acceptance tooling	1	2%	1%
7Q12	Calibration records	1	2%	1%
4Q6	Policies/ procedures availability	1	2%	1%
4Q3	Issuance of inspection stamps	1	2%	1%
4Q1	Inspection methods and plans	1	2%	1%
4P7	Identification/control of partially accepted parts	1	2%	1%

Criteria	Description	Number of Systemic Observations	Percent of PMA Systemic Observations	Percent with Procedures in Place
4P6	Familiarity with specifications	1	2%	1%
4P1	Change approval	1	2%	1%
3AE1	Software Configuration Management Plan	1	2%	3%
2E8	Major/minor design changes	1	2%	1%
2E4	AD incorporation into design	1	2%	2%
2E3	Completion of all inspections and tests	1	2%	1%
2E2	Drawing approval system	1	2%	1%
1Q6	Record retention schedule	1	2%	1%
1Q5	Tags, forms, etc. described	1	2%	1%
1Q4	Quality Manual	1	2%	1%
15M2	Feedback to higher-level management	1	2%	1%
10Q10	Receiving inspection	1	2%	1%

Table 15. – Isolated Observation at PMA Facilities

Criteria	Description	Number of Isolated Observations	Percent of PMA Isolated Observations	Percent with Procedures in Place
7Q14	Identification of gauges	3	5%	3%
4P9	Completed part/product identification	3	5%	3%
15M2	Feedback to higher-level management	3	5%	3%
10Q2	Use of approved suppliers	3	5%	3%
10Q1	Initial & periodic evaluation of suppliers	3	5%	3%
8E2	Control of test procedure/ instruction change	2	3%	3%
7Q4	Traceability to national/international standards	2	3%	2%
7Q16	Inaccurate tools and gauges identified	2	3%	2%
7Q11	Control of production tooling	2	3%	3%
7Q1	Approval/inspection of tools and gauges	2	3%	2%
4Q9	Traceability to raw material	2	3%	2%
4Q1	Inspection method and plans	2	3%	2%
4P2	Work instructions prepared	2	3%	2%
13E1	AD incorporation	2	3%	3%
11Q4	Material review record generated	2	3%	2%
11Q2	Permanent identification of scrap material	2	3%	2%
11Q1	Control of nonconforming products	2	3%	2%
10Q10	Receiving inspection	2	3%	2%
9Q9	Records of compliance	1	2%	2%
9Q4	Tanks and solutions checked	1	2%	2%
7Q9	Control of special processing equipment	1	2%	2%
7Q3	Tool & Gauge recall system	1	2%	1%

Criteria	Description	Number of Isolated Observations	Percent of PMA Isolated Observations	Percent with Procedures in Place
7Q15	Care of tool and gauges	1	2%	1%
4Q5	Inspection records	1	2%	1%
4P4	Work instructions control manufacturing processes	1	2%	1%
4P3	Work instructions reflect tech data	1	2%	1%
4P1	Change approval	1	2%	1%
4E1	Accord with FAA-approved design data	1	2%	1%
2E7	Design/Technical data document control	1	2%	1%
2E2	Drawing approval system	1	2%	1%
2E1	Design change approval	1	2%	1%
2C4	Data submittal for TSO minor design change approval	1	2%	33%
2C1	Minor design change approval	1	2%	1%
1Q4	Quality Manual	1	2%	1%
1M6	Policy/procedures availability	1	2%	1%
1M4	FAA designee authority	1	2%	2%
14C4	Relocation of manufacturing facility	1	2%	1%
12Q5	Identification of age control products	1	2%	1%
12Q4	Segregation of products in storage	1	2%	1%
12Q3	Storage of conforming parts	1	2%	1%
11Q7	Corrective action monitored	1	2%	1%

Table 16. – CFR-Based Observations at PMA Facilities

Criteria	Description	Number of CFR-Based Observations	Percent of PMA CFR-Based Observations	Percent with Procedures in Place
2E8	Major/minor design changes	2	18%	2%
10Q8	Verification of raw material	2	18%	2%
6Q1	Statistical sampling inspection plans	1	9%	2%
5Q3	Accord with process specifications	1	9%	1%
4P9	Completed product/part identification	1	9%	1%
4E1	Accord with FAA-approved design data	1	9%	1%
2E1	Design change approval	1	9%	1%
12Q6	Incorporation of design changes	1	9%	1%
11C1	Major changes approved	1	9%	1%